

REMARKS

Reconsideration and allowance of the above-identified application are respectfully requested. Claims 1-15 are currently pending.

Applicants note with appreciation the Examiner's consideration of and making of record the documents submitted with the Information Disclosure Statement filed on July 10, 1992.

Claims 5 and 7-15 were rejected under 35 U.S.C. § 112, second paragraph, as allegedly being indefinite for failing to particularly point out and distinctly claim the subject matter set forth therein. By the foregoing amendments, Applicants have addressed each of the specific concerns raised by the Examiner in the Office Action and have amended these claims to more particularly point out and distinctly claim the subject matter set forth therein.

Accordingly, Applicants respectfully request that the rejection of claims 5 and 7-15 under 35 U.S.C. § 112, second paragraph, be reconsidered and withdrawn.

The specification was objected to as allegedly failing to provide proper antecedent basis for the claimed subject matter. Although Applicants believe that the specification as originally filed provided sufficient antecedent basis for the claimed subject matter pursuant to 37 C.F.R. § 1.75(d)(1), to expedite prosecution, Applicants have amended the specification to provide literal antecedent basis

for the claimed subject matter identified in the Office Action. No new matter has been added.

Accordingly, Applicants respectfully request that the objection to the specification under 37 C.F.R. § 1.75(d)(1) be reconsidered and withdrawn.

The drawings were objected to under 37 C.F.R. § 1.83(a). Specifically, it was alleged in the Office Action that the filtering, amplifying and downconverting means and the first and second base transmitters of claim 14 were not shown in the drawings. With respect to the filtering, amplifying and downconverting means, note that this feature of Applicants' claim 14 combination is shown, for example, in Applicants' Figure 1 by the signal processing block 12. To simplify the language of claim 14, the foregoing phrase has been changed to --signal processing means--. With respect to the first and second base stations of claim 14, note the first and second base stations 32 and 35 of Figure 3.

For at least the foregoing reasons, it is respectfully requested that the objection to the drawings under 37 C.F.R. § 1.83(a) be reconsidered and withdrawn.

The Abstract has been objected to because the term "disclosed" was present therein. By the foregoing amendments, this word has been changed and, therefore, Applicants respectfully request that the objection to the Abstract be withdrawn.

Pursuant to the Examiner's request, the serial numbers of the patent applications referenced in the

specification of the above-identified application have been added by the foregoing amendments.

Claim 2 was rejected under 35 U.S.C. § 102(a), as allegedly being anticipated by Gilhousen et al (U.S. Patent No. 5,101,501). Specifically, the Office Action referenced column 3, lines 19-68 and column 4, lines 16-68 of the Gilhousen patent. This section of the Gilhousen patent describes a CDMA cellular telephone system wherein each cell site transmits a pilot carrier signal which is used by the mobile units to obtain initial system synchronization. The pilot signals of each cell are transmitted on a common frequency using the same spreading code but with a different code phase offset. When a pilot signal transmitted by a cell site located in a neighboring cell becomes stronger than the pilot signal transmitted by a current cell site, this is an indication that a handoff should be initiated.

It is not entirely clear from the Office Action how this portion of the Gilhousen disclosure is being interpreted to allegedly anticipate Applicant's claim 2 combination. However, the last paragraph of column 4 of the Gilhousen patent sets forth the steps which comprise the handoff procedure. Specifically, the system controller begins the handoff by assigning a modem in a new cell site to the call. The new cell site is given the PN code address associated with the call which is in progress between the mobile unit and the current cell site. The new cell site then begins transmitting an outbound signal using the same code. Thus, both the old and new cell sites use the same code to transmit signals to

the mobile station according to this embodiment of the Gilhousen patent.

Accordingly, Applicants respectfully submit that the Gilhousen patent fails to anticipate Applicants' claim 2 combination which includes, among other features, transmitting a control signal on a first frequency from a first base station using a waveform encoded with the first code to inform the mobile station of a second frequency and a second code which relate to the second base station.

Accordingly, it is respectfully that the rejection of Applicants' claim 2 combination under 35 U.S.C. § 102 over Gilhousen be reconsidered and withdrawn.

Applicants' claim 1 and 3-15 combinations were rejected under 35 U.S.C. § 103 as being unpatentable over Gilhousen in view of Bruckert (U.S. Patent No. 5,128,959). As correctly recognized by the Examiner, Gilhousen fails to teach or suggest the provision of first and second base stations transmitting signals on the same frequency but with different codes in the context of transferring communication from the first base station to the second. Thus, the Bruckert patent is relied upon to allegedly remedy this deficiency of Gilhousen.

As noted by the Examiner, Bruckert does disclose a radio system in which a first base site 11 uses a first code key C1 and a first frequency f1 and a second base site 12 uses a second code key C2 and a first frequency f1. However, Bruckert does not teach or suggest, among other features, the transmission of signals from different base stations on the

same frequency using different codes to the a mobile station in the process of transferring communications from a first base station to a second base station.

In this regard, note that Bruckert explicitly discloses a handoff procedure which is set forth in column 6, line 39 through column 7, line 21. In the disclosed handoff procedure of Bruckert, a mobile is first allocated a frequency f2 and a code key C3 for connection with a first cell site. As the mobile unit reaches the edge of the service coverage, the conversation is handed off to a nearby base site based on measured signal strength. After selecting a new base site, the mobile unit requests access to the new base site using the same frequency f2 and the same code key C3 (column 7, lines 18-21).

Thus, although Bruckert does disclose that base stations have the capability of using different codes on any particular frequency, in the context of transferring communications for a given mobile from one base station to another, Bruckert teaches away from the present invention since Bruckert teaches using the same code and the same frequency for the second base station during a handoff as described above. Accordingly, one of ordinary skill in the art, given the disclosures of Gilhousen and Bruckert would not have been motivated to modify the Gilhousen patent to arrive at Applicants' claimed combinations.

Thus, Applicants respectfully submit that neither Gilhousen nor Bruckert, taken alone or in combination, teach or suggest Applicants' claim 1 and 3-6 combinations,

including, among other features, transmitting a signal on a first frequency from a first base station to a mobile station using a waveform encoded with a first code and transmitting a signal on the first frequency from a second base station to the mobile station using a waveform encoded with a second code.

With respect to Applicants' claim 7-9 combinations, for at least the reasons set forth above, neither Gilhousen nor Bruckert teach or suggest, among other features, the step of decoding at the mobile station signals received simultaneously from the at least two base stations on a common frequency but using different codes and quantifying their relative signal strengths.

With respect to Applicants' claim 10-13 combinations, neither Gilhousen nor Bruckert teach or suggest, among other features, the step of transmitting a signal on a first frequency from a second base station to the mobile station using a waveform encoded with the third code, transmitting a first traffic signal on a first frequency from a first base station to the mobile station using a waveform encoded with a first code, and transmitting a control message on the first frequency from the first base station to the mobile station using a waveform encoded with the second code.

With respect to Applicants' claim 14 and 15 combinations the applied patents neither teach nor suggest, among other features, the provision of CDMA processing means for processing and decoding numerical values using a first and

second code to obtain demodulated data signals received from first and second base stations.

For at least the foregoing reasons, it is respectfully requested that the rejection of claims 1 and 3-15 under 35 U.S.C. § 103 over Gilhousen and Bruckert be reconsidered and withdrawn.

All of the objections and rejections raised in the Office Action having been addressed, it is respectfully submitted that the present application is in condition for allowance and a notice to that effect is earnestly solicited. Should the Examiner have any questions regarding this response or the application in general, he is invited to contact the undersigned at (703)-838-6632.

Respectfully submitted,

BURNS, DOANE, SWECKER & MATHIS

By Steven M. du Bois  
Steven M. du Bois  
Registration No. 35,023

George Mason Building  
Washington & Prince Sts.  
P.O. Box 1404  
Alexandria, VA 22313-1404  
Phone No. (703) 836-6620

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